TECHNICAL APPENDIX 1:

VISITOR DAY AND EXPENDITURE DATA

1. Outdoor Recreation

The BLM is a major provider of outdoor recreation opportunities in the Western U.S due to its extensive land holdings. Table 1.1 shows a comparison of BLM acreage with that of other major federal land management agencies. Table 1.2 summarizes the recreation resources and facilities found on BLM lands. For management purposes the agency divides sites into special and extensive recreation management areas (RMA). Extensive RMAs have minimal development with an emphasis on dispersed recreation activities. Special RMAs have recreation services and facilities where the emphasis is on more concentrated recreation activities. The agency has 355 special RMAs and 161 extensive RMAs with 765 developed recreation sites and 3150 undeveloped recreation sites (see Table 1.2). Within these sites are over 4 million acres of lakes and reservoirs; 156,328 miles of fishable streams; 5,948 miles of hiking trails; 16,698 campsites; 129,000 historic and archaeological sites; and more. The BLM manages over 28 million acres of waterfowl habitat; over 235 million acres of small game habitat; and over 206 million acres of big game habitat (see Table 1.2). The agency also has over 26 million acres under wilderness study.

Data from the BLM's Recreation Management Information System (RMIS), the Bureau's official recreation usage database, indicate that 63.5 million visitor days occurred on BLM lands in the Western United States in FY00. RMIS aggregates recreation into 12 categories shown in Table 1.3. Camping was the most common recreation activity accounting for nearly 42 percent of total visitor days. Following Camping were Trail-Related activities (16.0 percent); Miscellaneous Water activities (9.4 percent); Educational Opportunities (8.5 percent); Hunting (7.0 percent); Driving for Pleasure (5.0 percent); and Fishing (4.3 percent). Other activities including Miscellaneous Land, Picnicking, Winter Sports, and Specialized Sporting accounted for the remaining 8.0 percent of total visitor days.

Table 1.1. State Statistics and Percentages of Land Area

State	Population 1999	Total State Acres	**Total BLM Acres In State**	% BLM Acres In State	Total NPS Acres In State	% NPS Acres In State	Total USFS Acres In State	**% USFS Acres In State**
Alaska	619,500	385,296,000	86,567,451	22.47%	53,727,972	13.94%	22,193,395	5.76%
Arizona	4,778,332	72,901,760	14,249,135	19.55%	1,754,104	2.41%	11,246,668	15.43%
California	33,145,121	101,563,520	14,567,657	14.34%	4,684,864	4.61%	20,584,450	20.27%
Colorado	4,056,133	66,718,080	8,354,636	12.52%	647,963	0.97%	13,838,233	20.74%
Idaho	1,251,700	53,476,480	11,850,008	22.16%	66,167	0.12%	20,392,815	38.13%
Montana	882,779	94,168,320	8,036,010	8.53%	1,084,273	1.15%	16,805,969	17.85%
Nevada	1,809,253	70,745,600	47,840,497	67.62%	1,546,052	2.19%	5,801,183	8.20%
New Mexico	1,739,844	77,866,240	12,770,813	16.40%	346,550	0.45%	9,082,195	11.66%
Oregon*	9,072,515	105,710,720	16,595,265	15.7%	2,125,320	2.01%	24,700,836	23.37%
Utah	2,129,836	54,346,240	22,882,954	42.11%	2,015,616	3.71%	8,043,014	14.80%
Wyoming	479,602	62,664,960	18,375,570	29.32%	2,561,543	4.09%	8,682,526	13.86%
Total	59,964,615	1,145,457,920	262,089,996		70,560,422		161,371,284	

* Includes Washington population and acreages.

Source: Charles L. Zinser Outdoor Recreation: United States National Parks and Public Lands, 1995, Population updated to 1999

Table 1.2. BLM Recreation Resources and Facilities

Quantity	Attributes
355	Special Recreation Management Areas
161	Extensive Recreation Management Areas
41	Visitor Information Centers
21	Concessions
765	Developed Recreation Sites
3,150	Undeveloped Recreation Sites
129,000	Historic and Archaeological Sites
533	Boating access points
955	Caves
412	Campgrounds
16,698	Campsites
3,000	Species of Mammals, Birds, Reptiles and Fish
65,000	Miles of Roads Suitable for Travel by Normal Vehicles
2,254	Miles of 46 Designated National Backcountry Byways
9,203	Miles of Floatable Rivers
156,328	Miles of Fishable Streams
5,948	Miles of Hiking Trails
1,730	Miles of National Historic Trails
502	Miles of National Scenic Trails
163	Miles of National Recreation Trails
2,000	Miles of 32 rivers in the National Wild and Scenic Rivers System
4,138,078	Acres of Lakes and Reservoirs
28,390,000	Acres of Waterfowl Habitat
235,716,000	Acres of Small Game Habitat
206,000,000	Acres of Big Game Habitat
4,240,000	Acres of Lakes and Reservoirs

26,642,753	Acres Under Wilderness Study
2,433,000	Acres in Established Natural Areas
3,130,000	Acres in Areas of Critical Environment Concern
1,610,995	Acres in 66 National Wilderness Areas
14,203,121	Acres in 13 National Conservation Areas
1,000,000	Acres in 1 National Recreation Area
80	Acres in 1 National Outstanding Natural Area

Source: Charles L. Zinser Outdoor Recreation: United States National Parks and Public Lands, 1995

The mix of recreation activities on BLM land varied substantially between states. Camping was the most common activity for Arizona, California, Idaho, Montana, Nevada, Oregon, and Utah. The percentage of total visitor days associated with camping varied from 67.2 percent in Arizona to 21.6 percent in Idaho. For Alaska the most common activity was Educational Opportunities (35.1 percent). For Colorado and New Mexico the most common activity was Trail-Related (31.2 percent and 27.0 percent, respectively). For Wyoming the most common activity was hunting (19.8 percent).

Arizona reported the most recreation activity on BLM land of any state with over 15.5 million visitor days. Alaska had the least recreation activity on BLM lands with slightly over 1 million visitor days. Generally, more populated states tended to have more visitor days on BLM land. Both residents and nonresidents enjoyed recreation opportunities on BLM land. Overall 71 percent of visitor days on BLM land in the Western United States were by residents of the state, with 29 percent of the recreation visitor days by non-residents. More populated states such as California tended to have a higher proportion of total visitor days associated with residents (93.1 percent), while less populated states such as Wyoming tended to have a higher proportion of total visitor days associate with non-residents (65.1 percent). Some states, such as Utah, were fairly evenly divided between resident (50.6 percent) and nonresident (49.4 percent) use.

Table 1.3. RMIS Report 21 Categories

Recreation Category	Activities Included	
Camping		
Driving for Pleasure		
Educational Opportunity Activities	Environmental Education	Nature Study
	Interpretive Exhibit Viewing	Viewing - Wild Horse
	Viewing - Cultural Sites	Viewing - Wildlife
	Viewing – Other	
Fishing and Hunting Activities	Fishing	Trapping
	Big Game Hunting	Small Game Hunting
	Hunting-Upland Bird	Hunting - Waterfowl
Miscellaneous Land Activities	Archery	
	Gather Non-Commercial Products	
	Target Practicing	
Miscellaneous Water Activities	Boating - Motorized	Water Play
	Boating - Non-Motorized	Swimming
	Windsurfing	
Other	Photography	
Picnicking Activities		

Specialized Sporting Activities	Caving	
	Climbing (Rock, Ice etc)	
	Hang-Gliding	
Trail-Related Activities	ATV Riding	Four Wheel Driving
	Backpacking	Hiking/Walking/Running
	Bicycling - Mountain	Horseback Riding
	Bicycling - Road	Motorcycling
Winter Activities	Cross Country Skiing	Ski Touring
	Snowmobiling	Dog Mushing
	Downhill Skiing	Snow Play General

Source: Report 21, RMIS

2. Estimates of Visitor Spending

A review of visitor spending studies revealed a host of problems and limitations for applicability to BLM lands. Studies tended to be site specific, making it difficult to compare with and generalize to recreation on public lands and on BLM lands in particular. There was a lack of consistency in visitor day definitions and what was included in different activity categories. Length of stay, residence, items included in expenditures, size of region, and per trip versus per day figures all varied over the studies reviewed. The following section reviews the studies by Report 21 category pertaining to BLM lands (see Table 1.3, for a list of RMIS categories for recreation activities.).

Camping

Expenditure data for camping were extremely limited. Expenditure data were only found for California and Montana. In California in 1984, campers spent $29.05 per day on average. It was estimated that $5,640,000 was spent on camping in Montana in 1988, which breaks down to approximately $9.59 per user.

Table 1.4 summarizes the data that were collected and pertained to sector expenditures. Data were collected at Shasta and Trinity Lakes in California, as well as at the Great Basin National Park, located in both Utah and Nevada. All of the data were collected in 1992 (Borda 1997).

The California study divided camping into two categories: developed and dispersed. Developed camping means that recreationists utilize some sort of improved camping facility, a campground or motor home for instance. Dispersed camping means that the participants camp without the aid of an improved campground or motor home. The study measured the spending of persons who were not residents of the state where the trip took place on a per trip basis (expenditures per non-resident per trip). Campers utilizing ***developed*** sites spent $40.79 on average on eating/drinking per trip and $42.28 on lodging ***per trip***, while only spending $8.00 on transportation and $10.74 on equipment. ***Dispersed*** campers, who did not have to pay higher developed campground fees, spent only $21.20 on average on eating/drinking and $6.11 on

lodging. The dispersed campers had higher transportation and equipment costs of approximately $17.79 and $22.78 respectively.

The Utah/Nevada study measured the expenditures of all recreationists per trip and did not specify if campers were using developed or dispersed sites. The expenditures in this study were considerably lower than those of the California studies, with eating/drinking expenditures of $4.22 and lodging expenditures of $3.28. The equipment expenditures were much lower than were reported in the California studies as well, with expenditures of approximately $1.67 per recreationist. Transportation expenditures, about $7.24 per recreationist, were relatively close to those of the developed campers.

Table 1.4. Camping: Expenditures Per Non-Resident Per Trip, 1992

	Developed Camping	**Dispersed Camping**	
Sector	Shasta Lake (California)	Shasta Lake (California)	Great Basin NP(Utah/Nevada)
Eating/Drinking	$40.79	$21.20	$4.22
Lodging	$42.28	$6.11	$3.28
Retail Trade	N/A	N/A	$6.31
Transportation	$8.00	$17.79	$7.24
Equip. Purchase/Rental	$10.74	$22.78	$1.67
Other	$5.52	$3.45	$1.01

Source: Borda (1997)

Driving for Pleasure

Driving for pleasure activities include mechanized driving on- and off-road. Three studies were found that contained expenditure data for the Driving for Pleasure category. The first (Bureau of Land Management 2000) gave the national average expenditure in 1986, which was $6.70 per person per day. The second study (Cordell 1992) estimated that Colorado recreationists spend $263,800 on driving for pleasure activities, or approximately $0.28 per user.

The third study (Borda 1997) contained sector data on driving for pleasure activities. It is summarized in Table 1.5 below. The study was conducted in 1992 in California and estimated that $8.87 was spent on eating/drinking, $16.38 was spent on lodging, $2.51 was spent on transportations, and $84.88 was spent on equipment purchases and rentals.

Table 1.5. Driving for Pleasure: California, 1992

Sector	Expenditures per Non-Resident per Day
Eating/Drinking	$8.87
Lodging	$16.38
Transportation	$2.51
Equip. Purchase/Rental	$84.88
Other	$1.51

Source: Borda (1997)

Educational Opportunity Activities

The RMIS category, "Educational Opportunity Activities," included viewing wildlife. One study by the U. S. Fish & Wildlife Service (USFWS), "1996 Survey of Hunting, Fishing, and Wildlife-Associated Recreation," pertained to wildlife viewing. The study records total expenditures and trip expenditures by activity location and by participant residence (Tables 1.6 – 1.9). Total expenditures include trip-related expenditures as well as equipment and other expenditures.

Table 1.6 shows the total expenditures by location for viewing wildlife. Expenditures by location are defined as the expenditures that are recorded in the state where the activity took place. Approximately $8.9 billion were spent within all of the BLM states on viewing wildlife during 1996. California, Oregon, and Arizona were the states in which most of the spending took place, with 27 percent, 26 percent and 12 percent of total spending occurring in each state respectively. Idaho had the lowest total expenditures by location with $146 million in spending, or less than 2 percent of the total.

Total expenditures per user by location were also calculated. California had the highest value with $1,901 per user. Utah had the lowest per user expenditures with $94 per user. The difference in expenditures between California and Utah users is probably explained by the number of trips made and expenditures on equipment.

Trip expenditures by location for viewing wildlife are summarized in Table 1.7. These are the expenditures that were directly related to the costs of the trip and were recorded in the state where the actual spending occurred. California had the highest trip expenditures with nearly $1.1 billion, or 27 percent of the $3.9 billion trip expenditures recorded within the Western states. Oregon had the second highest trip expenditures by location, with $770.5 million. Idaho had the lowest trip expenditures with $61 million, less than 2 percent of total trip expenditures. Expenditures per user were greatest in California ($860) and Alaska ($428) and lowest in Nevada ($41).

Table 1.6. Total Wildlife Viewing Expenditures by Location, 1996

BLM States	Total Expenditures by Location (x1000)	Percent of Total	Expenditures per User
Alaska	$780,531	8.76%	$512.13
Arizona	$1,028,732	11.55%	$1,292.99
California	$2,396,809	26.91%	$1,901.52
Colorado	$792,115	8.89%	$394.16
Idaho	$146,105	1.64%	$112.40
Montana	$218,864	2.46%	$319.58
Nevada	$262,798	2.95%	$124.90
New Mexico	$428,835	4.81%	$292.83
Oregon	$2,353,670	26.43%	$161.86
Utah	$263,626	2.96%	$94.23
Wyoming	$234,616	2.63%	$144.35
TOTAL	$8,906,701	100.00%	$448.79

Table 1.7. Wildlife Viewing Trip Expenditures by Location, 1996

BLM States	Trip Expenditures by Location (x1000)	Percent of Total	Expenditures per User
Alaska	$652,346	16.48%	$428.02
Arizona	$273,987	6.92%	$344.37
California	$1,084,506	27.39%	$860.40
Colorado	$426,201	10.77%	$212.08
Idaho	$61,192	1.55%	$47.08
Montana	$130,841	3.30%	$191.05
Nevada	$86,114	2.18%	$40.93
New Mexico	$165,481	4.18%	$113.00
Oregon	$770,486	19.46%	$61.18
Utah	$125,477	3.17%	$44.85
Wyoming	$182,487	4.61%	$112.28
TOTAL	$3,959,118	100.00%	$199.49

Source: USFWS "1996 Survey of Hunting, Fishing, and Wildlife-Associated Recreation"

Source: USFWS "1996 Survey of Hunting, Fishing, and Wildlife-Associated Recreation"

Expenditures by residence are calculated as spending with regard to the spenders' state of residence. Table 1.8 summarizes total expenditures by residence in 1996. California and Oregon residents spent the most on wildlife viewing, with $2.9 billion and $2.0 billion respectively. California and Oregon together comprise 63 percent of total expenditures by residence. Wyoming residents spent the least on wildlife viewing with only $63 million, or less than 1 percent of the total spent by all BLM states. California ($2,280) and Arizona ($1,160) had the highest per user expenditures, while Wyoming had the lowest ($39).

Total trip expenditures by residence are summarized in Table 1.9. Californians spent the most on trip expenditures ($1.6 billion), or over 54 percent of the total trip expenditures within the BLM states. New Mexico ($43.6 million) and Wyoming ($23.1 million) contributed the least to trip expenditures. Per user expenditures were highest in California ($1,253) and lowest in Wyoming ($14.21).

Table 1.8. Total Wildlife Viewing Expenditures by Residence, 1996

BLM States	**Total Expenditures by Residence (x1000)**	Percent of Total	Expenditures per User
Alaska	$239,714	3.10%	$157.28
Arizona	$923,065	11.92%	$1,160.18
California	$2,874,350	37.12%	$2,280.37
Colorado	$679,938	8.78%	$338.34
Idaho	$135,168	1.75%	$103.99
Montana	$137,793	1.78%	$201.20
Nevada	$233,065	3.01%	$110.77
New Mexico	$306,116	3.95%	$209.03
Oregon	$2,003,813	25.87%	$138.13
Utah	$148,161	1.91%	$52.96
Wyoming	$63,142	0.82%	$38.85
TOTAL	$7,744,325	100.00%	$390.22

Source: USFWS "1996 Survey of Hunting, Fishing, and Wildlife-Associated Recreation"

Table 1.9. Wildlife Viewing Trip Expenditures by Residence, 1996

BLM States	**Trip Expenditures by Residence (x1000)**	Percent of Total	Expenditures per User
Alaska	$104,983	3.63%	$68.88
Arizona	$162,431	5.61%	$204.16
California	$1,579,434	54.57%	$1,253.05
Colorado	$320,791	11.08%	$159.63
Idaho	$59,370	2.05%	$45.67
Montana	$52,978	1.83%	$77.36
Nevada	$62,666	2.17%	$29.78
New Mexico	$43,620	1.51%	$29.79
Oregon	$431,082	14.89%	$41.90
Utah	$53,985	1.87%	$19.30
Wyoming	$23,089	0.80%	$14.21
TOTAL	$2,894,429	100.00%	$145.85

Source: USFWS "1996 Survey of Hunting, Fishing, and Wildlife-Associated Recreation"

Fishing

The majority of data collected for this category were from the 1991 and 1996 USFWS "Survey of Hunting, Fishing, and Wildlife-Associated Recreation." Expenditure information on fishing consisted of expenditures by location, residence, and some sector data collected in Arizona and California. The expenditure by location data were collected in 1996 and are summarized in Tables 1.10 and 1.11. More than 40 percent of total fishing expenditures in BLM states were spent in California, with less than 10 percent of the total expenditures occurring in each of the other remaining states. Alaska had the highest expenditures per user per year ($907), and Wyoming had the second highest ($364). Arizona had the lowest per user spending ($81).

Nearly 40 percent of trip expenditures by location were spent in California, and 16 percent of all trip expenditures were spent in Oregon. Alaska, Wyoming, and Montana had the highest trip expenditures per user ($727, $232, and $197 respectively).

Table 1.10. Total Fishing Expenditures By Location, 1996

BLM States	Total Expenditures by Location (x1000)	Expenditure per User	Percent of Total
Alaska	$548,364	$906.51	7.30%
Arizona	$358,144	$80.80	4.77%
California	$3,324,359	$104.60	44.28%
Colorado	$634,447	$166.40	8.45%
Idaho	$279,950	$235.71	3.73%
Montana	$243,501	$277.76	3.24%
Nevada	$211,092	$132.22	2.81%
New Mexico	$195,012	$114.30	2.60%
Oregon	$1,327,202	$194.93	17.63%
Utah	$231,292	$114.37	3.08%
Wyoming	$174,575	$363.63	2.33%
TOTAL	$7,527,938	$131.60	100.00%

Source: USFWS "1996 Survey of Hunting, Fishing, and Wildlife-Associated Recreation"

Table 1.11. Fishing Trip Expenditures By Location, 1996

BLM States	Trip Expenditures by Location (x1000)	Expenditure per User	Percent of Total
Alaska	$439,915	$727.23	12.02%
Arizona	$184,999	$41.74	5.05%
California	$1,454,325	$45.76	39.72%
Colorado	$272,016	$71.34	7.43%
Idaho	$131,827	$110.99	3.60%
Montana	$172,781	$197.09	4.72%
Nevada	$73,940	$46.31	2.02%
New Mexico	$105,658	$61.93	2.89%
Oregon	$594,084	$83.45	16.22%
Utah	$119,886	$59.28	3.27%
Wyoming	$111,552	$232.36	3.05%
TOTAL	$3,660,983	$64.00	100.00%

Source: USFWS "1996 Survey of Hunting, Fishing, and Wildlife-Associated Recreation"

Total 1991 fishing expenditures and 1991 fishing trip expenditures by residence are summarized in Tables 1.12 and 1.13. California and Oregon residents spent the most, with $1.8 and $1.5 billion in total expenditures respectively. Together, these two states made up over 68 percent of total fishing expenditures by residence. Alaska and Oregon had the highest per user expenditures with $420 and $158 respectively.

The largest portion (47 percent) of 1991 fishing trip expenditures by residence occurred in California. Oregon residents incurred just over 21 percent of total trip expenditures for the BLM states, with each of the remaining states spending less than 10 percent of the total. Alaska had the highest per user trip expenditures ($127). Other states spent $30 to $70 per user.

Table 1.12. Total Fishing Expenditures By Residence, 1991

BLM States	Total Expenditures by Residence (x1000)	Per Capita Total Expenditures	Percent of Total
Alaska	$239,166	$420.13	5.03%
Arizona	$299,592	$79.63	6.30%
California	$1,795,949	$59.05	37.77%
Colorado	$319,283	$94.81	6.72%
Idaho	$145,456	$140.01	3.06%
Montana	$71,200	$88.14	1.50%
Nevada	$80,123	$62.35	1.69%
New Mexico	$112,863	$72.95	2.37%
Oregon	$1,470,606	$158.05	30.93%
Utah	$154,205	$87.03	3.24%
Wyoming	$66,270	$144.78	1.39%
TOTAL	$4,754,713	$18.86	100.00%

Source: USFWS "1991 Survey of Hunting, Fishing, and Wildlife-Associated Recreation"

Table 1.13. Fishing Trip Expenditures By Residence, 1991

BLM States	Trip Expenditures by Residence (x1000)	Per Capita Expenditures	Percent of Total
Alaska	$74,558	$127.00	3.32%
Arizona	$146,978	$51.26	6.55%
California	$1,061,958	$34.39	47.30%
Colorado	$158,756	$45.88	7.07%
Idaho	$59,019	$55.34	2.63%
Montana	$39,812	$48.41	1.77%
Nevada	$54,401	$40.88	2.42%
New Mexico	$50,988	$32.26	2.27%
Oregon	$480,220	$59.05	21.39%
Utah	$84,798	$46.55	3.78%
Wyoming	$33,833	$73.00	1.51%
TOTAL	$2,245,321	$42.37	100.00%

Source: USFWS "1991 Survey of Hunting, Fishing, and Wildlife-Associated Recreation"

Two studies from 1985 that broke out spending within different economic sectors; the results are compiled in Table 1.14. The studies covered expenditures in Arizona and California. The figures differed in the eating/drinking and transportation sectors. The Arizona study estimated that recreationists spent about $20 more than the California study for eating/drinking. The California study estimated that recreationists spent about $12 more for transportation costs than in Arizona. The remaining sectors were fairly comparable between the two studies.

Table 1.14. Fishing Expenditures per Trip by Sector, 1985

Sector	Expenditures per Recreator per Trip (Arizona)	Expenditures per Recreator per Trip (California)
Eating/Drinking	$39.57	$21.90
Lodging	$24.08	$27.45
Transportation	$9.60	$21.99
Fuel	$39.70	N/A
Equip. Purchase/Rental	$6.45	$11.95
Fees & Licenses	$32.99	N/A
Other	$34.93	$5.04

Sources: Borda (1997)

Hunting

Three studies contributed information on hunting. The BLM conducted one study (Silvey, "Economic Contribution" 1996), and two studies, the 1991 and 1996 "Survey of Hunting, Fishing, and Wildlife-Associated Recreation," were conducted by the U.S. Fish & Wildlife Service (U.S. Dept. of the Interior 1991). Hunting expenditures are summarized in Tables 1.15 through 1.18.

Total expenditure data from the 1996 USFWS study are relatively close to the estimates done by the BLM. According to the 1996 BLM study, the greatest proportion of total expenditures for hunting occurred in Oregon (25 percent), followed by Colorado (20 percent) and California (15 percent). Oregon (25 percent) had the highest proportion of total hunting in the 1996 USFWS study as well, followed by California (22.5 percent) and Colorado (17 percent). Data were not as close for total expenditures per user. The BLM figures were significantly lower than the USFWS figures. The highest BLM figure for expenditures per user per year was $87.80 for Wyoming. Six of the Western states in the USFWS study had figures well over $100, and two were over $300 (Alaska, with $328 per user; and Wyoming with $310 per user).

Table 1.15. Total Hunting Expenditures by Location, 1996 (BLM Study)

BLM States	Total Expenditures by Location	Percent of Total Expenditures	Expenditures per User
Alaska	$21,437,601	3.05%	$35.44
Arizona	$37,709,345	5.37%	$8.51
California	$103,307,350	14.71%	$3.25
Colorado	$137,322,676	19.56%	$36.02
Idaho	$47,779,894	6.80%	$40.23
Montana	$19,525,039	2.78%	$22.27
Nevada	$52,553,655	7.48%	$32.92
New Mexico	$14,681,496	2.09%	$8.61
Oregon	$174,468,085	24.85%	$54.08
Utah	$51,242,687	7.30%	$25.34
Wyoming	$42,151,066	6.00%	$87.80
TOTAL	$702,178,894	100.00%	$12.27

Source: Silvey, "Economic Contribution" 1996

Table 1.16. Total Hunting Expenditures by Location, 1996 (USFWS Study)
BLM States

	Total Expenditures by Location (x1000)	Percent of Total	Expenditures per User
Alaska	$198,436	5.22%	$328.04
Arizona	$220,438	5.80%	$6.94
California	$854,958	22.50%	$26.90
Colorado	$659,711	17.37%	$173.03
Idaho	$246,139	6.48%	$207.24
Montana	$215,878	5.68%	$246.25
Nevada	$94,915	2.50%	$59.45
New Mexico	$85,756	2.26%	$50.26
Oregon	$941,709	24.79%	$192.27
Utah	$132,248	3.48%	$65.40
Wyoming	$148,830	3.92%	$310.01
TOTAL	$3,799,018	100.00%	$66.41

Source: USFWS "1996 Survey of Hunting, Fishing, and Wildlife-Associated Recreation"

The USFWS studies shown in Tables 1.17 and 1.18 provided information regarding trip expenditures by location (1996) and residence (1991). California had the highest trip expenditures by residence in 1991, with $178.8 million, or about 30 percent. Oregon had the second highest trip expenditures by residence, with $132.3 million, or 22.4 percent. Trip spending by location was greater in terms of total dollars spent, but proportionately lower for California and Oregon in 1996. Recreationists spent $277 million in California, which was only 22 percent of total trip spending. Oregonians spent $226.2 million, only 18 percent of total trip spending. Trip spending rose dramatically in 1996 for Colorado to $231 million, or nearly 18 percent of total trip spending by location.

The highest per user trip expenditures by residence in 1991 occurred in Alaska ($47), Montana ($38), Wyoming ($37) and Idaho ($34). The highest per user trip expenditures by location in 1996 were recorded in Alaska ($158), Wyoming ($193), and Montana ($113). All other per user trip expenditure by location in 1996 were below $100.

Table 1.17. Hunting Trip Expenditures by Location, 1996 (USFWS Study)

BLM States	Trip Expenditures by Location (x1000)	Percent of Total	Per Capita Expenditure
Alaska	$95,695	7.60%	$158.19
Arizona	$66,092	5.25%	$21.59
California	$277,060	22.01%	$8.72
Colorado	$231,227	18.37%	$60.65
Idaho	$78,778	6.26%	$66.33
Montana	$99,605	7.91%	$113.62
Nevada	$20,762	1.65%	$13.00
New Mexico	$29,997	2.38%	$17.58
Oregon	$226,224	17.97%	$41.94
Utah	$40,326	3.20%	$19.94
Wyoming	$92,869	7.38%	$193.44
TOTAL	$1,258,635	100.00%	$22.00

Source: USFWS "1996 Survey of Hunting, Fishing, and Wildlife-Associated Recreation"

Table 1.18. Hunting Trip Expenditures by Residence, 1991

(USFWS Study)

BLM States	Trip Expenditures by Residence (x1000)	Percent of Total	Per Capita Expend
Alaska	$26,837	4.55%	$47.14
Arizona	$39,448	6.68%	$10.48
California	$178,786	30.30%	$5.88
Colorado	$50,155	8.50%	$14.89
Idaho	$35,558	6.03%	$34.23
Montana	$30,902	5.24%	$38.25
Nevada	$21,623	3.66%	$16.83
New Mexico	$23,102	3.91%	$14.93
Oregon	$132,334	22.42%	$18.55
Utah	$34,630	5.87%	$19.54
Wyoming	$16,761	2.84%	$36.62
TOTAL	$590,136	100.00%	$11.14

Source: USFWS "1991 Survey of Hunting, Fishing, and Wildlife-Associated Recreation"

Miscellaneous Land Activities

The only expenditure data available for the RMIS category, "Miscellaneous Land Activities," was for primary non-consumptive wildlife activities. These data are from the USFWS study, "1991 Survey of Hunting, Fishing, and Wildlife-Associated Recreation" and are total expenditures and trip expenditures by residence. They are summarized in Tables 1.19 and 1.20.

Californians contributed more than 50 percent of the total expenditures by residence (Table 1.19). Oregon followed with 17 percent. The nine remaining states contributed less than 10 percent each. Oregon had the highest expenditures per user ($778), followed by Nevada ($640) and Alaska ($630). Average per user total expenditures across all Western states was $421.

Trip expenditures by residence for 1991 (Table 1.20) show that Californians again contributed the most on trip related expenses (54 percent), followed by Oregon (19 percent). Per user trip expenditures were again highest in Oregon ($372), Nevada ($217), and Alaska ($214). Average per user trip expenditures across all Western states was $162.

Table 1.19. Total Expenditures By Residence For Miscellaneous Land Activities, 1991

BLM States	Total Expenditures by Residence (x1000)	Percentage of Total	Expenditures per User
Alaska	$144,180	2.81%	$629.61
Arizona	$320,355	6.24%	$295.80
California	$2,605,192	50.71%	$402.04
Colorado	$377,557	7.35%	$325.20
Idaho	$68,017	1.32%	$176.67
Montana	$102,205	1.99%	$327.58
Nevada	$215,602	4.20%	$639.77
New Mexico	$209,371	4.08%	$449.29
Oregon	$873,329	17.0%	$777.67
Utah	$170,154	3.31%	$337.61
Wyoming	$51,122	1.00%	$269.06
TOTAL/Ave.	$5,137,084	100.00%	$420.94

Source: USFWS "1991 Survey of Hunting, Fishing, and Wildlife-Associated Recreation"

Table 1.20. Trip Expenditures By Residence For Miscellaneous Land Activities, 1991

BLM States	Trip Expenditures by Residence (x1000)	Percentage of Total	Per Capita Expenditures
Alaska	$49,024	2.28%	$214.08
Arizona	$101,911	4.74%	$94.10
California	$1,157,836	53.86%	$178.68
Colorado	$132,068	6.14%	$113.75
Idaho	$39,563	1.84%	$102.76
Montana	$34,174	1.59%	$109.53
Nevada	$73,101	3.40%	$216.92
New Mexico	$61,194	2.85%	$131.32
Oregon	$417,955	19.44%	$372.18
Utah	$58,848	2.74%	$116.76
Wyoming	$24,171	1.12%	$127.22
TOTAL	$2,149,845	100.00%	$161.57

Source: USFWS "1991 Survey of Hunting, Fishing, and Wildlife-Associated Recreation"

Miscellaneous Water Activities

A few activities for which data were collected fell under the category, "Miscellaneous Water Activities." These included boating-general and swimming. Little data in the studies pertained to this project, however. A 1984 California study reported that boaters spent an average of $33.53 per day. A 1997 nationwide study estimated that swimmers spend an average of $21 per day on swimming activities.

Picnicking

Only one estimate was found for picnicking during the data collection process (U.S. Department of the Interior, Bureau of Land Management 1984). The study estimated that picnickers in California spent $13.02 per day on picnicking.

Specialized Sports

Rock climbing is the only activity in the category of specialized sports for which data were found. A Colorado study (U. S. Forest Service, Gold Belt Tour 1992) estimated that total expenditures within Colorado were approximately $228,600, or approximately $1.64 per user.

Trail-Related Activities

Horseback riding and hiking/running/walking were the two activities within this category for which data were found. A California study (U.S. Department of the Interior, Bureau of Land Management 1984) reported that expenditures per person per day for horseback riding were approximately $19.78. Expenditures per person per day for hiking/running/walking were approximately $13.78.

Winter Activities

A study including winter sports in Montana (Recreation 2000) estimated that $1.5 million was spent within the state in 1988. This breaks down to a per-user expenditure of $13.50.

3. Conclusion

The survey of recreation expenditure data indicated that much of the research tends to be very site and/or activity specific. As a result there is a lack of consistency in the methodology used to develop and report recreation expenditure estimates. In addition there are often significant time lags between studies that make comparing individual results difficult. The only two sources of recreation expenditure data that were found to have consistent methodology and reporting format across individual states and activities were: 1) the U.S. Fish and Wildlife Service's 1991 and 1996 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, and 2) the US Forest Service's Public Area Recreation Visitor Survey (PARVS) and CUSTOMER data. While both these data sources do have some limitations, they are the most consistent data sources that are currently available.